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# Special Operations Forces Industry Conference



**Col Duke Richardson**

Program Executive Officer – Fixed Wing

Portfolio Review and APBI

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# Acquisition Principles

- ◆ Deliver Capability to the User Expeditiously
- ◆ Exploit Proven Techniques and Methods
- ◆ Keep Warfighters Involved Throughout the Process
- ◆ Unconventional Thinking Is a Key ENABLER
- ◆ Credibility Enables Freedom of Action
- ◆ Take Risk and Manage It!



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# SOF Acquisition Truths

**FAST** *does not equal* **UNDISCIPLINED**

**MORE BUREAUCRACY** *does not ensure a* **BETTER PRODUCT**

**RISK** *must be* **MANAGED NOT AVOIDED**

**FASTER** *does not have to increase* **COST/RISK**

**COMPETITION** *can be done* **QUICKLY**

**UNCONVENTIONAL THINKING** *is an* **ENABLER**

**CREDIBILITY AND TRANSPARENCY** *enable* **FREEDOM OF ACTION**

**ACCELERATING THE FORCE IS OUR ACQUISITION KPP**



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# Find – Infiltrate - Finish

## MOBILITY

- ♦ CV-22
- ♦ Non-Standard Aviation Systems
- ♦ EC-130J
- ♦ MC-130E Talon
- ♦ MC-130P Shadow
- ♦ MC-130J
- ♦ MC-130H Talon II
- ♦ MC-130W Combat Spear



## MISSION SYSTEMS

- ♦ Directional Infrared Countermeasures
- ♦ Silent Knight Radar
- ♦ Training and Mission Planning



## ISR

- ♦ SUAS
- ♦ MEUAS
- ♦ EUAS
- ♦ MQ-1 / MQ-9
- ♦ Special Mission Aircraft



## STRIKE

- ♦ AC-130H Spectre
- ♦ AC-130U Spooky
- ♦ AC-130J
- ♦ MC-130W Dragon Spear
- ♦ SOPGM

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# CV-22 SOF Osprey

- ◆ Mission: Provides Long-Range, High Speed, All Weather, Infiltration, Exfiltration, and Resupply of SOF Teams in Hostile, Denied, and Political Sensitive Areas in a Single Period of Darkness
- ◆ Urgent Deployment Acquisition Initiative – Enhanced Situational Awareness (ESA) Will Provide Interoperability with SOF C2 Nodes, SOF A/C, and SOF Ground Teams
- ◆ BOI: 50 FOC: FY16
- ◆ Total on Hand: 18



## Technology Upgrades/Current Efforts

- ◆ Block 10 Retrofit
- ◆ Block 20 Development/Production
- ◆ Joint Performance Based Logistics (JPBL) for Long Term Sustainment
- ◆ Low Cost Mods

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# Non-Standard Aviation (NSAV)



- ◆ BOI: 38 (21 Light, 17 Medium)

- ◆ Provides Short Takeoff and Landing (STOL), Light and Medium Category, Intra-Theater Cargo Aircraft to Support TSOC World-Wide Mobility Requirements
- ◆ Provides Increased SOF Flexibility and Capability in Supporting Austere and Remote Locations Not Serviced by Reliable and Safe Commercial Aviation Service

## Technology Interest Areas

- ◆ Modular Mission Equipment



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# SOF C-130 EC-130J Commando Solo

- ◆ Airborne Military Information Support Operations (MISO) Broadcast Platform
- ◆ Broadcasts TV and Radio Programs to Military and Civilian Target Audiences in Support of COCOM Information Operations Campaigns
- ◆ 193rd Special Operations Wing (AFSOC)
  - ◆ Pennsylvania ANG



## Technology Upgrades/Current Efforts

- ◆ Digital Solo
- ◆ Narrow Band/Broad Band (NB3)

- ◆ BOI: 7
- ◆ Total on Hand: 7



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# AC/MC-130 Recapitalization

## CDR USSOCOM Memo, 30 Jun 09

***"Our goal is to ultimately recapitalize our fleet of AC-130 and MC-130 aircraft. Our current program of record recapitalizes our fleet of 37 MC-130E/P SOF tankers by 2016 with MC-130Js. We intend to further recapitalize and expand our fleet of 25 AC-130H/U to 33 Precision Strike Package-equipped aircraft. In the future, we will also need to recapitalize our 32 MC-130W/Hs."***

MDS		Qty	Avg Age (2010)
MC-130E		10	46
MC-130P		23	43
MC-130H		20	23
MC-130W		12	22
AC-130H		8	41
AC-130U		17	21



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# SOF C-130 Tankers (MC-130E/P/J)

- ◆ Provides Day/Night Mobility in Politically Denied/Sensitive Areas



## Technology Upgrades/Current Efforts

- ◆ Variable Speed Drogue (VSD)
- ◆ MC-130 E & P Recap Program (MC-130J) including Increments 1 & 2  
Special Mission Processor (Inc 3)
- ◆ Defensive Systems

- ◆ BOI: 14 MC-130E; 23 MC-130P
- ◆ Total on Hand: 9 MC-130E; 23 MC-130P

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# SOF C-130 Penetrators (MC-130H/W/J)

- ◆ Provides Day/Night Mobility in Politically Denied/Sensitive Areas
- ◆ Provides Deep Penetrating Helo Refueling During SOF Operations



## Technology Upgrades/Current Efforts

- ◆ MC-130H/W Recap Program (MC-130J) including Increments 1 & 2
- ◆ Special Mission Processor (Increment 3)
- ◆ TF/TA Radar
- ◆ Defensive Systems
- ◆ BOI: 12 MC-130W; 20 MC-130H
- ◆ Total on Hand: 12 MC-130W; 20 MC-130H

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# SOF C-130 Strike (AC-130H/U/J)

- ◆ Provides Close Air Support, Air Interdiction, and Armed Reconnaissance



## Technology Upgrades/Current Efforts

- ◆ AC-130H Recap program (AC-130J)
- ◆ Special Mission Processor (Inc 3)
- ◆ Precision Strike Package (PSP)
- ◆ AAQ-39 Sensor Upgrade (GMS-2)
- ◆ Defensive Systems
- ◆ BOI: 8 AC-130H; 17 AC-130U
- ◆ Total on Hand: 8 AC-130H; 17 AC-130U

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# Precision Strike Package

## Dragon Spear (MC-130W)

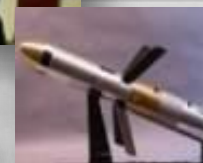
- ◆ Provides Limited Day/Night Mobility
- ◆ Provides Armed Over-Watch Capability
- ◆ Precision Guided Munitions
- ◆ Medium-Caliber Gun



*SOPGMs*



*Dual EO/IR Sensors*



*SOF Comms Suite*



*Medium-Caliber Gun*



*Crew Workstations  
Fire Control System  
Mission Management*



*Dragon Spear Precision Strike Package (PSP)  
Completed Modification to MC-130W*

- ◆ BOI: 12
- ◆ Total on Hand: 10

### Technology Upgrades/Current Efforts

- ◆ Dragon Spear Precision Strike Package (PSP)

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# Precision Strike Package AC-130J

- ◆ Provide Close Air Support, Armed Recon, and Armed Over-Watch Capability
- ◆ Precision Guided Munitions
- ◆ Medium-Caliber Gun



SOPGMs



Dual EO/IR Sensors



SOF Comms Suite



Crew Workstations  
Fire Control System  
Mission Management



Medium-Caliber Gun

## Technology Upgrades/Current Efforts

- ◆ Tactical Payload Integration
- ◆ Precision Strike Package (PSP)

- ◆ BOI: 16
- ◆ Total on Hand: 0

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# Small Unmanned Aircraft Systems (SUAS)

- ◆ Provides Rapidly Deployable Multi-Intelligence ISR Capability In Denied Environments

- ◆ Capabilities

- ◆ 2+ Hour Endurance
- ◆ 1,200 Ft AGL Surveillance Altitude
- ◆ 14,000 Ft MSL Flight Altitude
- ◆ Flexible Support For Land and Maritime Operations
- ◆ Ease of Mobility (Man-Portable)
- ◆ Digitally Stabilized Gimbaled Payload; Dual EO/IR



- ◆ BOI: 90

## Technology Upgrades/Current Efforts

- ◆ Digital Data Link (DDL) Retrofits
- ◆ Improved Image Processing
- ◆ Greater Endurance



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# Mid-Endurance Unmanned Aircraft System

- ◆ Provides World-Wide Contractor Owned and Operated ISR Services
- ◆ Capabilities:
  - ◆ Target Development and Video Capture
  - ◆ Route Reconnaissance



## Technology Interest Areas

- ◆ Next Generation IR Camera
- ◆ Dual EO/IR
- ◆ Encrypted Digital Data Link



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# Expeditionary Unmanned Aircraft Systems

- ◆ Provides a Dedicated Land-Based ISR Capability to SOF Task Groups and Squadrons

- ◆ Capabilities:

- ◆ 6 Hour Endurance with 100 Pound Payload
- ◆ 70 nm Data Link Range
- ◆ 10,000 Ft MSL Flight Altitude
- ◆ Fully Automatic Take-Off and Landing
- ◆ EO/IR Sensor with Laser Illuminator
- ◆ Transport Full System in  $\leq 2$  C-130s



## Technology Upgrades/Current Efforts

- ◆ Payload Enhancements

- ◆ BOI: 1.5
- ◆ Total on Hand: 1

\*A System Consists of 6 Air Vehicles and 2 Ground Control Stations

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# Medium Altitude Long Endurance Tactical (MALET)

- ◆ Provides Persistent Intelligence, Surveillance, Reconnaissance, and Targeting (ISR-T)
- ◆ Capabilities
  - ◆ 18-24 hour endurance
  - ◆ BLOS
  - ◆ Altitude: 25K ft MQ-1; 50K ft MQ-9,
  - ◆ Range: 770 miles MQ-1; 1,150 miles MQ-9
  - ◆ Payload: 750 lbs MQ-1; 3,800 lbs MQ-9
  - ◆ Transmission of Full-Motion Video
  - ◆ Geographic Location of Ground Elements



## Technology Interest Areas

- ◆ Payload Enhancements
  - ◆ Multiple secure radios
  - ◆ Additional EO/IR sensor
- 
- ◆ BOI: 32 MQ-1; 25 MQ-9
  - ◆ Total on Hand: 29 MQ-1; 11 MQ-9



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# Training And Mission Planning

## ◆ Training Programs of Record

- ◆ Simulator Block Updates (SBUD)
- ◆ MC-130W Simulators
- ◆ AC-130U Sensor Part Task Trainer (SPTT)
- ◆ AC-130U Electronic Warfare Officer (EWO) Station
- ◆ U-28A Aircrew Training System (ATS)



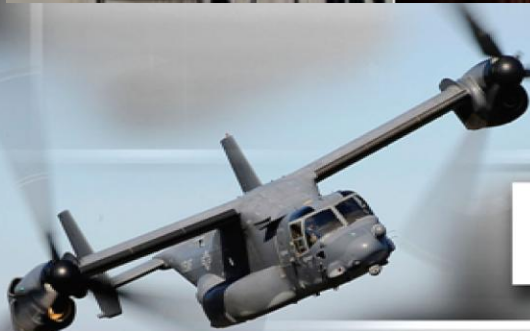
## ◆ Mission Planning Programs of Record

- ◆ Special Operations Mission Planning Environment (SOMPE)



## Technology Upgrades/Current Efforts

- ◆ Desk Top Trainers/Deployable Task Trainers
- ◆ 3D/Virtual Reality/Gaming Technology
- ◆ Migration To Joint Mission Planning System



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# Silent Knight Radar

- ◆ Provides a SOF-Common Terrain-Following, Terrain-Avoidance (TF/TA) Multi-Mode Radar



## Current Efforts:

- ◆ Continue Engineering and Manufacturing Development
- ◆ Continue Prototype Radar Integration and Testing
- ◆ Continue Contractor Flight Testing
- ◆ Install MH-47G/MH-60M Integration Kits
- ◆ Refine Developmental Test Plans

## Technology Upgrades:

- ◆ Digital Map/Radar Blending
- ◆ Solid State Transmitter

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# Upcoming Acquisitions

- ◆ Mid-Endurance Unmanned Aircraft System (MEUAS) II
- ◆ SOF Common TF/TA Radar for MC-130J
- ◆ Small UAS Payloads
- ◆ AC-130J PSP Integration
- ◆ AC/MC-130J Defensive Systems



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## MEUAS II

- ◆ World-Wide Mid-Endurance Unmanned Aircraft System Providing Intelligence Gathering, Target Surveillance, and Reconnaissance (ISR) Services
- ◆ Turn-Key Operation – 24/7 ISR Product Availability Up To 900 Flight Hours Per Site Per Month
- ◆ Currently Five Detachments Providing 2,000 Flight Hours Per Month – Driven by Operational Needs

### Acquisition Strategy

Full and Open Competition for Contractor Owned Contractor Operated Turn-Key ISR Services

### Period of Performance

Firm Fixed Price, 5 Year Indefinite Delivery Indefinite Quantity (IDIQ)

### Milestones

RFP Release	8 Apr 2011
Contract Award	1 <sup>st</sup> Qtr 2012

### Point of Contact

USSOCOM SORDAC-FW

### Funding

Supplemental / OCO O&M  
Varies Annually

### Current Contract/OEM

MEUAS / Boeing



## MC-130J Terrain Following/Terrain Avoidance Radar System (MCTF)

- ◆ Provides Low Probability of Intercept/Low Probability of Detect TF/TA capability for new MC-130J Talon III aircraft
- ◆ Two Phase Approach - Single Line-of-Sight Radar in Phase I; Second Line-of-Sight in Phase II

### Acquisition Strategy

Full and Open Competition for Development of Phase I with hooks for Phase II

### Period of Performance

Cost Plus Type contract for Development, Firm Fixed Price for Production

### Milestones

RFP Release	3rd Qtr 2011
Contract Award	1st Qtr 2012

### Point of Contact

USSOCOM SORDAC-FW

### Funding

MFP-11 RDT&E and PROCUREMENT  
Varies Annually

### Current Contract/OEM

MC-130J / Lockheed Martin





# Small UAS Payloads

- ◆ Identify, develop, integrate and test SOF-unique mission kits for group 1-3 UAS
- ◆ Test EW payloads that provide added capabilities to find, fix and finish time-sensitive, high-value targets

## Acquisition Strategy

Partner with Naval Special Warfare and integrate and test on USSOCOM UAS

## Period of Performance

TBD

## Milestones

RFP Release  
Contract Award

TBD  
TBD

## Point of Contact

USSOCOM SORDAC-FW

## Funding

MFP-11 RDT&E and Procurement

## Current Contract/OEM

FY12 New Start



## AC-130J Precision Strike Package Integration

- ◆ Mission Equipment Integration onto MC-130J to Convert to AC-130J Configuration
- ◆ Aircraft Modifications to Accommodate Gun System, Sensors, PGMs, Operator Consoles, & Comms

### Acquisition Strategy

TBD

### Period of Performance

FY13+

### Milestones

Study/AoA	TBD
RFP Release	TBD
Contract Award	TBD

### Point of Contact

USSOCOM SORDAC-FW

### Funding

MFP-11 RDT&E and PROCUREMENT  
Varies Annually

### Current Contract/OEM

New Start





## AC/MC-130J Defensive Systems

- ◆ Improve MC-130J Defensive Systems and Situational Awareness
- ◆ Requirement built on TERESA, ASACM, and LAIRCM CDDs

### Acquisition Strategy

Full and Open Competition

### Period of Performance

Cost Plus Type contract for Development,  
Firm Fixed Price for Production

### Milestones

Study/AoA	4th Qtr 2011
RFP Release	TBD
Contract Award	TBD

### Point of Contact

USSOCOM SORDAC-FW

### Funding

MFP-4 and MFP-11 RDT&E and  
PROCUREMENT  
Varies Annually

### Current Contract/OEM

MC-130J / Lockheed Martin